REMARKS

The Office Action mailed November 21, 2003 has been carefully reviewed and the foregoing amendment and following remarks have been made in consequence thereof.

Claims 1-22 are now pending in this application. Claims 1-22 stand rejected. Claims 1, 9, 11, 12, 18-20, and 22 have been amended.

The rejection of Claims 1-8, 11-17, 20 and 21 under 35 U.S.C. § 103 as being unpatentable over Skantar (U.S. Patent 5,817,934) in view of Mixon (U.S. Patent 6,364,432) is respectfully traversed.

Skantar describes an automated terminal test system used to conduct terminal tests of brake equipment (2) on a train consist (1). In one embodiment, Skantar describes a test control box (30) that includes a control (31). The test control box (31) is connected to a head of train locomotive (8) and is accessible from the outside of the locomotive. The test control box is also linked to computer controlled brake equipment, such that when the test control box is activated through the control of a railyard worker, that worker may manipulate the application and release of a brake and may charge and vent a brake pipe. Accordingly, the control box enables the railyard worker to apply and release the brake automatically, and charge and vent the brake pipe automatically using the test control box.

Additionally, Skantar describes another embodiment wherein a portable radio controller (40) is used to conduct the terminal tests of the brake equipment on a train consist. The portable, radio-controlled automated terminal test system includes an end of train transceiver means (19) and a head of train transceiver means (47). The portable radio controller transmits a plurality of brake test signals to the head of train transceiver means. The plurality of brake test signals include a terminal test mode activation signal, a brake leakage test signal, a brake application test signal, and a brake release test signal (see col. 14 lines 22-27). Within this embodiment, a worker may apply and release the brake automatically, and charge and vent the brake pipe automatically using the portable radio controller.

Mixon describes an automated electronic brake control system (10) to control braking on a towed vehicle that includes electric or hydraulically actuated brakes. Notably, Mixon

does not describe nor suggest a brake control device for pneumatically-operated brakes such as may be found on a piece of railroad rolling stock. The system includes an upright enclosure (1) having a separable cover, the enclosure containing an energy source (5), a breakaway safety switch (70), a controller with a grade and motion detection device (30), timer (40), relay (80) and circuit breaker (60) and means (50) for connecting the electronic brake control device to the electrical circuitry of a towing vehicle and a towed vehicle. The brake control device is mounted upon the towed vehicle and the controller has capabilities of sensing a change of velocity in at least one direction. Electric circuitry connects the braking circuitry of the towing vehicle to the braking system of the towed vehicle such that when towing vehicle brakes are applied, the brake control device supplies power to the braking system of the towed vehicle proportional to the sensed change in velocity. A hand-held remote receiver/transmitter may be used to alert an operator of a fault in the electronic brake control system self diagnostic routine, to change the operation of the electronic brake control system, to initially set the brakes, to disable or enable the swaying capabilities and/or apply braking force to the brakes.

Applicants submit that neither Skantar nor Mixon, considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 1 recites a method for monitoring and diagnosing the health of a braking system for a railroad train that has a plurality of rolling stock vehicles, the braking system includes a brake pipe extending the length of the train, with a portion of the braking system being associated with each rolling stock vehicle, such portion having at least one brake pipe section, one reservoir for air under pressure, at least one brake cylinder powered by air in the reservoir, and a feed valve for controlling the flow of air from the reservoir into the brake cylinder on each rolling stock vehicle, and the feed valve on a plurality of rolling stock vehicles having a radio-based transmitter/receiver, receiving data indicative of the operation of a respective portion of the brake system, for transmitting data indicative of the operation of the respective portion of the braking system associated with each rolling stock vehicle, the method includes "providing a radio-based hand-held transmitter/receiver having a processor for analyzing data...retrieving brake system data and information from each feed valve transmitter/receiver on the train through radio communications between each feed valve transmitter/receiver and the hand-held radio transmitter/receiver using a hand-held analyzer...interpreting the retrieved data

pertaining to a functional status of the portion of the braking system associated with each rolling stock vehicle...performing a maintenance function on the brake system for the train based on the interpretation of the data for the portion of the brake system for each rolling stock vehicle."

Neither Skantar nor Mixon, considered alone or in combination, describe or suggest a feed valve on a plurality of rolling stock vehicles having a radio-based transmitter/receiver, wherein the feed valve is for receiving data indicative of the operation of a respective portion of the brake system, and for transmitting data indicative of the operation of the respective portion of the braking system associated with each rolling stock vehicle. Rather, although Skantar does describe a train having a plurality of rolling stock vehicles, and each piece of rolling stock does have a feed valve, Skantar does not describe or teach a feed valve having a transmitter/receiver for receiving and transmitting data indicative of the operation of that portion of the brake system, and Mixon does not describe or teach a feed valve on a plurality of rolling stock vehicles having a radio-based transmitter/receiver.

Furthermore, neither Skantar nor Mixon, considered alone or in combination, describe or suggest retrieving brake system data and information from each feed valve transmitter/receiver on the train through radio communications between each feed valve transmitter/receiver and the hand-held radio transmitter/receiver using a hand-held analyzer. Rather, Skantar describes a portable radio controller used to conduct terminal tests of the brake equipment on a train consist, wherein the portable radio controller transmits a plurality of brake test signals to the head of train transceiver means and wherein the computer controlled brake equipment retrieves brake system data and information from the head of train transceiver means and the end of train transceiver means, not each of the radio based feed valve receiver transmitters, and Mixon describes a hand-held remote receiver/transmitter that communicates with the brake control system rather than with a feed valve transmitter/receiver.

Furthermore, the Office Action dated 5/5/03 and referenced in the Office Action dated 11/21/03 suggests at page 2 that Skantar describes "a method and system for diagnosing a braking system using portable radio analyzer...that retrieves data from a brake pipe pressure sensor to be analyzed to perform maintenance." Applicants respectfully traverse this suggestion. In fact, Applicants respectfully submit that Skantar neither describes nor teaches

a portable radio analyzer that retrieves data to be analyzed. Specifically, the portable radio controller (40) described in Skantar is merely a testing device used for conducting terminal tests of the brake equipment by transmitting, via radio communication, to the head of train transceiver (47) a plurality of brake test signals including a terminal test mode activation signal, a brake leakage test signal, a brake application test signal, and a brake release test signal (see col. 14 lines 22-27). The head of the train transceiver (47) then relays the brake test signals to the computer controlled brake equipment (2) so that the portable radio controller (40) controls the application and release of the brake through the computer controlled brake equipment (2). As such, the portable radio analyzer does not communicate with the feed valves, and certainly does not receive data to be analyzed to perform maintenance as suggested in the Office Action.

Furthermore, the Office Action dated 5/5/03 and referenced in the Office Action dated 11/21/03 suggests at page 3 that "Skantar does show a radio-based feed valve in that the valve is controlled by a radio controlled computer." Applicants respectfully traverse this suggestion. In fact, Applicants submit that Skantar does not show a radio based feed valve as described in Claim 1. Specifically, Skantar describes computer controlled brake equipment which includes a brake valve controlled generally by the computer controlled brake equipment (see col. 8 lines 8-13). Nowhere in the cited art does Skantar show that the computer controlled brake equipment is radio controlled as suggested in the Office Action. Rather, the computer controlled brake equipment (2) is controlled by the cab integration equipment (7), whereby the head of train transceiver (37) relays to the cab integration equipment (7) through a first communications link (61) the last railcar brake pipe pressure data, the last railcar motion data and the head of train brake pipe pressure data. The cab integration equipment (7) then outputs the data to the computer controlled brake equipment (2) through a second communications link (62). The computer controlled brake equipment (2) then uses the data to control the brake valve (see col. 8 lines 49-62). Additionally, Claim 1, as amended, recites a feed valve having a radio-based transmitter/receiver, wherein the transmitter/receiver receives data indicative of the operation of a respective portion of the brake system and transmits data indicative of the operation of the respective portion of the braking system, and Applicant respectfully submits that Skantar does not describe or suggest the feed valve as recited in Claim 1.

For the reasons set forth above, Applicants respectfully submit that Claim 1 is patentable over Skantar in view of Mixon.

Claims 2-8 depend, directly or indirectly, from Claim 1. When the recitations of Claims 2-8 are considered in combination with the recitations of Claim 1, Applicants respectfully submit that Claims 2-8 are likewise patentable over Skantar in view of Mixon.

Claim 11 recites a system for diagnosing the health of a braking equipment for a railroad train comprising a plurality of rolling stock vehicles, wherein the braking equipment includes a brake pipe extending the length of the train, with a portion of the braking equipment being associated with each rolling stock vehicle, such portion comprising at least one brake pipe section connected to a reservoir of pressurized air, and at least one brake cylinder powered by air in the reservoir, and a radio transmitter/receiver equipped feed valve for controlling the flow of air from the reservoir into the brake cylinder on a plurality of the rolling stock vehicles, the system includes "a radio-based hand-held analyzer...at least one radio-based transmitter/receiver on each radio equipped feed valve receiving data indicative of the operation of the braking equipment for transmitting data indicative of the operation of the portion of the braking equipment associated with each of the rolling stock vehicles, said transmitter/receiver configured to communicate with said hand-held analyzer...at least one data unit configured to communicate with the hand-held analyzer."

Neither Skantar nor Mixon, considered alone or in combination, describe or suggest a system for diagnosing the health of a braking equipment, wherein the braking equipment includes a radio-based hand-held analyzer and at least one radio-based transmitter/receiver on each radio equipped feed valve receiving data indicative of the operation of the braking equipment for transmitting data indicative of the operation of the portion of the braking equipment associated with each of the rolling stock vehicles, wherein the transmitter/receiver is configured to communicate with the hand-held analyzer. More specifically, neither Skantar nor Mixon, considered alone or in combination, describe or suggest at least one radio-based transmitter/receiver on each radio equipped feed valve receiving data indicative of the operation of the braking equipment for transmitting data indicative of the operation of the portion of the braking equipment associated with each of the rolling stock vehicles, wherein the transmitter/receiver is configured to communicate with the hand-held analyzer. Rather, Skantar describes a portable radio controller used to conduct terminal tests of the

brake equipment on a train consist, wherein the portable radio controller transmits a plurality of brake test signals to the head of train transceiver means and wherein the computer controlled brake equipment retrieves brake system data and information from the head of train transceiver means and the end of train transceiver means, not each of the radio based feed valve receiver transmitters, and Mixon describes a hand-held remote receiver/transmitter that communicates with a brake control system, but Mixon does not describe that the hand-held remote receiver/transmitter communicates with the radio-based transmitter/receiver on each radio equipped feed valve.

For the reasons set forth above, Applicants respectfully submit that Claim 11 is patentable over Skantar in view of Mixon.

Claims 12-17 depend directly from Claim 11. When the recitations of Claims 12-17 are considered in combination with the recitations of Claim 11, Applicants respectfully submit that Claims 12-17 is likewise patentable over Skantar in view of Mixon.

Claim 20 recites a hand-held analyzer for testing and diagnosing the health of a brake system for a railroad train having a plurality of rolling stock vehicles, the brake system including a brake pipe extending the length of said train, with a portion of the brake system being associated with each rolling stock vehicle, the portion having at least one brake pipe section, one reservoir, at least one brake cylinder powered by air in the reservoir, and a feed valve for controlling the flow of air from the reservoir into the brake cylinder on each rolling stock vehicle, and a radio-based transmitter/receiver on a plurality of feed valves receiving data indicative of the operation of the brake system for transmitting data indicative of the operation of the portion of the brake system associated with each respective rolling stock vehicle, the hand-held analyzer comprising a radio based hand-held transmitter/receiver having a processor for analyzing data, an antenna for communicating with the feed valve transmitter/receiver, a user interface for inputting data and commands to be communicated to the feed valve transmitter/receiver, and a display for viewing data received from the feed valve transmitter/receiver, said hand-held analyzer configured to "utilize said user interface to input a command to query the feed valve transmitter/receiver for brake system data indicative of an operational state of said brake system...transmit the query to the feed valve transmitter/receiver utilizing said antenna...receive the brake system data from said feed

valve transmitter/receiver via radio communications indicative of an operational state of the brake system utilizing said antenna...display the brake system data on said display."

Neither Skantar nor Mixon, considered alone or in combination, describe or suggest a hand-held analyzer for testing and diagnosing the health of a brake system that includes a radio-based transmitter/receiver on a plurality of feed valves receiving data indicative of the operation of the brake system for transmitting data indicative of the operation of the portion of the brake system associated with each respective rolling stock vehicle, the hand-held analyzer having, a radio based hand-held transmitter/receiver having a processor for analyzing data, an antenna for communicating with the feed valve transmitter/receiver, a user interface for inputting data and commands to be communicated to the feed valve transmitter/receiver, and a display for viewing data received from the feed valve transmitter/receiver, wherein the hand-held analyzer is configured to transmit a query to the feed valve transmitter/receiver, and receive the brake system data from the feed valve transmitter/receiver via radio communications indicative of an operational state of the brake system. Specifically, neither Skantar nor Mixon, considered alone or in combination, describe or suggest a hand-held analyzer configured to transmit a query to the feed valve transmitter/receiver, and receive the brake system data from the feed valve transmitter/receiver via radio communications indicative of an operational state of the brake system. Rather, Skantar describes a portable radio controller used to conduct terminal tests of the brake equipment on a train consist, wherein the portable radio controller transmits a plurality of brake test signals to the head of train transceiver means and wherein the computer controlled brake equipment retrieves brake system data and information from the head of train transceiver means and the end of train transceiver means, not each of the radio based feed valve receiver transmitters, and Mixon describes a hand-held remote receiver/transmitter that communicates with the brake control system rather than with a radio-based feed valve transmitter/receiver.

Applicants respectfully traverse the assertion in the Office Action dated 5/5/03 and referenced in the Office Action dated 11/21/03 that Skantar inherently includes a display. Applicants respectfully submit that "[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. In re King, 231 USPQ 136 (Fed. Cir. 1986). The Examiner has not

provided any basis in fact and/or technical reasoning that the test box or the portable radio controller includes a display. Rather, Skantar only describes a command functionality for the portable radio controller wherein controls are activated but, Skantar does not describe or suggest a display associated with the portable radio controller.

For the reasons set forth above, Applicants respectfully submit that Claim 20 is patentable over Skantar in view of Mixon.

Claim 21 depends, directly or indirectly, from Claim 20. When the recitations of Claim 21 are considered in combination of the recitations of Claim 20, Applicants respectfully submit that Claim 21 likewise is patentable over Skantar in view of Mixon.

For the reasons set forth above, Applicants respectfully request that the §103 rejection of Claims 1-8, 11-17, 20, and 21 be withdrawn.

The rejection of Claims 9-10, 18-19, and 22 under 35 U.S.C. §103 as being unpatentable over Skantar (U.S. Patent 5,817,934) as modified by Mixon (U.S. Patent 6,364,432) and further in view of Bessler et al. (U.S. Patent 6,246,950) is respectfully traversed.

Skantar and Mixon are described above. Bessler et al. describe a model-based incipient failure detection system that includes at least one replaceable unit, at least one sensor to generate signals representative of current engine conditions related to the at least one replaceable unit, and a controller (28) that includes an embedded replaceable unit model algorithm. Current locomotive operating conditions and ambient conditions are utilized within the algorithm to generate a model-based predicted value for the at least one sensor. The controller compares the at least one sensor signals to the model-based predicted values for calculating deviations between them and for detecting incipient failure of the at least one replaceable unit. The data collected from the sensors are sent to a remote service center (50) through a communications link (52), for example, a "geo-synchronous," "L-band" satellite system, or a "Little Leo" system. Although, Bessler et al. describe sending data through a communications link to a work station, a minicomputer, a microcomputer, a supercomputer or an onboard locomotive monitoring sub-system, Bessler et al. do not describe nor suggest a network or a web page.

Claims 9 and 10 depend, directly or indirectly, from independent Claim 1 which recites a method for monitoring and diagnosing the health of a braking system for a railroad train that has a plurality of rolling stock vehicles, the braking system includes a brake pipe extending the length of the train, with a portion of the braking system being associated with each rolling stock vehicle, such portion having at least one brake pipe section, one reservoir for air under pressure, at least one brake cylinder powered by air in the reservoir, and a feed valve for controlling the flow of air from the reservoir into the brake cylinder on each rolling stock vehicle, and the feed valve on a plurality of rolling stock vehicles having a radio-based transmitter/receiver, receiving data indicative of the operation of a respective portion of the brake system, for transmitting data indicative of the operation of the respective portion of the braking system associated with each rolling stock vehicle, the method includes "providing a radio-based hand-held transmitter/receiver having a processor for analyzing data...retrieving brake system data and information from each feed valve transmitter/receiver on the train through radio communications between each feed valve transmitter/receiver and the hand-held radio transmitter/receiver using a hand-held analyzer...interpreting the retrieved data pertaining to a functional status of the portion of the braking system associated with each rolling stock vehicle...performing a maintenance function on the brake system for the train based on the interpretation of the data for the portion of the brake system for each rolling stock vehicle."

None of Skantar, Mixon, nor Bessler et al., considered alone or in combination, describe or suggest a feed valve on a plurality of rolling stock vehicles having a radio-based transmitter/receiver, wherein the feed valve is for receiving data indicative of the operation of a respective portion of the brake system, and for transmitting data indicative of the operation of the respective portion of the braking system associated with each rolling stock vehicle. Rather, although Skantar does describe a train having a plurality of rolling stock vehicles, and each piece of rolling stock does have a feed valve, Skantar does not describe or teach a feed valve having a transmitter/receiver for receiving and transmitting data indicative of the operation of that portion of the brake system, and Mixon does not describe or teach a feed valve on a plurality of rolling stock vehicles having a radio-based transmitter/receiver, and Bessler et al. does not describe a feed valve having a transmitter/receiver for receiving and transmitting data indicative of the operation of that portion of the brake system.

Furthermore, none of Skantar, Mixon, nor Bessler et al., considered alone or in combination, describe or suggest retrieving brake system data and information from each feed valve transmitter/receiver on the train through radio communications between each feed valve transmitter/receiver and the hand-held radio transmitter/receiver using a hand-held analyzer. Rather, Skantar describes a portable radio controller used to conduct terminal tests of the brake equipment on a train consist, wherein the portable radio controller transmits a plurality of brake test signals to the head of train transceiver means and wherein the computer controlled brake equipment retrieves brake system data and information from the head of train transceiver means and the end of train transceiver means, not each of the radio based feed valve receiver transmitters, Mixon describes a hand-held remote receiver/transmitter that communicates with the brake control system rather than with a feed valve transmitter/receiver, and Bessler et al. describe a model-based incipient failure detection system that includes at least one sensor wherein data collected from the sensors are sent to a remote service center through a communications link to a computer.

For the reasons set forth above, Applicants respectfully submit that Claim 1 is patentable over Skantar as modified by Mixon and further in view of Bessler et al.

Claims 9 and 10 depend, directly or indirectly, from Claim 1. When the recitations of Claims 9 and 10 are considered in combination with the recitations of Claim 1, Applicants respectfully submit that Claims 9 and 10 are likewise patentable over Skantar as modified by Mixon and further in view of Bessler et al.

Claims 18 and 19 depend, directly or indirectly, from independent Claim 11 which recites a system for diagnosing the health of a braking equipment for a railroad train comprising a plurality of rolling stock vehicles, wherein the braking equipment includes a brake pipe extending the length of the train, with a portion of the braking equipment being associated with each rolling stock vehicle, such portion comprising at least one brake pipe section connected to a reservoir of pressurized air, and at least one brake cylinder powered by air in the reservoir, and a radio transmitter/receiver equipped feed valve for controlling the flow of air from the reservoir into the brake cylinder on a plurality of the rolling stock vehicles, the system includes "a radio-based hand-held analyzer...at least one radio-based transmitter/receiver on each radio equipped feed valve receiving data indicative of the operation of the braking equipment for transmitting data indicative of the operation of the

portion of the braking equipment associated with each of the rolling stock vehicles, said transmitter/receiver configured to communicate with said hand-held analyzer...at least one data unit configured to communicate with the hand-held analyzer."

None of Skantar, Mixon, nor Bessler et al., considered alone or in combination, describe or suggest a system for diagnosing the health of a braking equipment, wherein the braking equipment includes a radio-based hand-held analyzer and at least one radio-based transmitter/receiver on each radio equipped feed valve receiving data indicative of the operation of the braking equipment for transmitting data indicative of the operation of the portion of the braking equipment associated with each of the rolling stock vehicles, wherein the transmitter/receiver is configured to communicate with the hand-held analyzer. More specifically, none of Skantar, Mixon, nor Bessler et al., considered alone or in combination, describe or suggest at least one radio-based transmitter/receiver on each radio equipped feed valve receiving data indicative of the operation of the braking equipment for transmitting data indicative of the operation of the portion of the braking equipment associated with each of the rolling stock vehicles, wherein the transmitter/receiver is configured to communicate with the hand-held analyzer. Rather, Skantar describes a portable radio controller used to conduct terminal tests of the brake equipment on a train consist, wherein the portable radio controller transmits a plurality of brake test signals to the head of train transceiver means and wherein the computer controlled brake equipment retrieves brake system data and information from the head of train transceiver means and the end of train transceiver means, not each of the radio based feed valve receiver transmitters, Mixon describes a hand-held remote receiver/transmitter that communicates with a brake control system, but Mixon does not describe that the hand-held remote receiver/transmitter communicates with the radio-based transmitter/receiver on each radio equipped feed valve, and Bessler et al. describe a model-based incipient failure detection system that includes at least one sensor wherein data collected from the sensors are sent to a remote service center through a communications link to a computer.

For the reasons set forth above, Applicants respectfully submit that Claim 11 is patentable over Skantar as modified by Mixon and further in view of Bessler et al.

Claims 18 and 19 depend directly from Claim 11. When the recitations of Claims 18 and 19 are considered in combination with the recitations of Claim 11, Applicants

respectfully submit that Claims 18 and 19 are likewise patentable over Skantar as modified by Mixon and further in view of Bessler et al.

Claim 22 depends, directly or indirectly, from independent Claim 20 which recites a hand-held analyzer for testing and diagnosing the health of a brake system for a railroad train having a plurality of rolling stock vehicles, the brake system including a brake pipe extending the length of said train, with a portion of the brake system being associated with each rolling stock vehicle, the portion having at least one brake pipe section, one reservoir, at least one brake cylinder powered by air in the reservoir, and a feed valve for controlling the flow of air from the reservoir into the brake cylinder on each rolling stock vehicle, and a radio-based transmitter/receiver on a plurality of feed valves receiving data indicative of the operation of the brake system for transmitting data indicative of the operation of the portion of the brake system associated with each respective rolling stock vehicle, the hand-held analyzer comprising a radio based hand-held transmitter/receiver having a processor for analyzing data, an antenna for communicating with the feed valve transmitter/receiver, a user interface for inputting data and commands to be communicated to the feed valve transmitter/receiver, and a display for viewing data received from the feed valve transmitter/receiver, said hand-held analyzer configured to "utilize said user interface to input a command to query the feed valve transmitter/receiver for brake system data indicative of an operational state of said brake system...transmit the query to the feed valve transmitter/receiver utilizing said antenna...receive the brake system data from said feed valve transmitter/receiver via radio communications indicative of an operational state of the brake system utilizing said antenna...display the brake system data on said display."

None of Skantar, Mixon, nor Bessler et al., considered alone or in combination, describe or suggest a hand-held analyzer for testing and diagnosing the health of a brake system that includes a radio-based transmitter/receiver on a plurality of feed valves receiving data indicative of the operation of the brake system for transmitting data indicative of the operation of the portion of the brake system associated with each respective rolling stock vehicle, the hand-held analyzer having, a radio based hand-held transmitter/receiver having a processor for analyzing data, an antenna for communicating with the feed valve transmitter/receiver, a user interface for inputting data and commands to be communicated to the feed valve transmitter/receiver, and a display for viewing data received from the feed valve transmitter/receiver, wherein the hand-held analyzer is configured to transmit a query

to the feed valve transmitter/receiver, and receive the brake system data from the feed valve transmitter/receiver via radio communications indicative of an operational state of the brake system.

More specifically, none of Skantar, Mixon, nor Bessler et al., considered alone or in combination, describe or suggest a hand-held analyzer configured to transmit a query to the feed valve transmitter/receiver, and receive the brake system data from the feed valve transmitter/receiver via radio communications indicative of an operational state of the brake system. Rather, Skantar describes a portable radio controller used to conduct terminal tests of the brake equipment on a train consist, wherein the portable radio controller transmits a plurality of brake test signals to the head of train transceiver means and wherein the computer controlled brake equipment retrieves brake system data and information from the head of train transceiver means and the end of train transceiver means, not each of the radio based feed valve receiver transmitters, Mixon describes a hand-held remote receiver/transmitter that communicates with the brake control system rather than with a radio-based feed valve transmitter/receiver, and Bessler et al. describe a model-based incipient failure detection system that includes at least one sensor wherein data collected from the sensors are sent to a remote service center through a communications link to a computer.

For the reasons set forth above, Applicants respectfully submit that Claim 20 is patentable over Skantar as modified by Mixon and further in view of Bessler et al.

Claim 22 depends, directly or indirectly, from Claim 20. When the recitations of Claim 22 are considered in combination of the recitations of Claim 20, Applicants respectfully submit that Claim 22 likewise is patentable over Skantar as modified by Mixon and further in view of Bessler et al.

For the reasons set forth above, Applicants respectfully request that the §103 rejection of Claims 9, 10, 18, 19, and 22 be withdrawn.

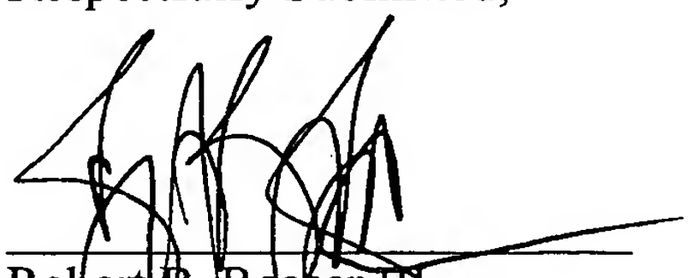
Moreover, the rejection of Claims 1-8, 11-17, 20 and 21 under 35 U.S.C. § 103 as being unpatentable over Skantar in view of Mixon, and the rejection of Claims 9-10, 18-19, and 22 under 35 U.S.C. §103 as being unpatentable over Skantar as modified by Mixon and further in view of Bessler et al. is further traversed on the grounds that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Skantar using the teachings of Mixon and Bessler et al.. More specifically, as is well established, obviousness cannot be established by combining the teachings of the

cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Skantar, Mixon, nor Bessler et al. describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Skantar with Mixon and Bessler et al. because there is no motivation to combine the references suggested in the art.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants respectfully request that the Section 103 rejection be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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